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‘Awareness’ is Essential if Accessibility in Existing Buildings

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Abstract. On the basis of a study of accessibility in an existing building this article suggests an increased awareness of accessibility during the design and building process.

Keywords. Accessibility, cultural heritage, existing building, public accessibility adviser, design process.

Introduction

It is the dominant opinion among the architects that is much more problematic to establish accessibility in existing buildings than in new buildings, because an existing building creates barriers and limitations different than in a project where the building is designed from the beginning.

1. The case Nordkraft

This article is about Nordkraft, an former power station consisting of five interconnected buildings with individual levels which was converted into a centre for culture and leisure in the period 2006-2011; section A, B, and C. The owner was the municipality of Aalborg but the stakeholders were both private and public. A new disability policy was enacted by the city council in 2008, where the municipality employed a new accessibility adviser after a period with no advisor. She became involved in the project even though section A and B was almost completed. The level of accessibility at Nordkraft was high. The accessibility was integrated in the architecture in a way where every solution functioned in connection with the other solutions.

The Nordkraft was a case study of the conversion and rebuilding of an existing building. It was our hypothesis that the different solutions of accessibility would be depending on existing building technology, cultural heritage and architecture. It turned out to be different than expected. We found out the solutions also was influenced by the process and the involved professionals. We have named the factor ‘awareness’.

In order to discuss the level of accessibility within the project we evaluated 14 different solutions focusing on: 1) handrail and tread edge marking, 2) tactile walking surface

indicators (TWSIs), indoor and outdoor, 3) A ramp, 4) space for wheelchair users in a cinema, 5) lift, 6) parking spaces which cater for disabled people.

Furthermore we mapped the process of the project bases on architectural drawings, minutes, emails and interview with the architect and the public accessibility advisor.

The accessibility adviser pointed out that the handrail at the staircases in section B did not meet the requirements of the Building Regulation since they were not easy to grip and hold onto. As a result of the problematizing of the handrail a dialogue between the professional was initiated since the owner insisted on a redesign of the handrail in section C based in the experience from section B. The handrail was not replaced in section B because of the economy. The dialogue and the design of the handrail were qualified by the knowledge that the accessibility adviser contributed with about the requirement.

Another aspect of knowledge is about whether the architect wanted to meet the requirements. At Nordkraft the accessibility adviser pointed out that a ramp was unsafe for want of guard rail. The architect explained that his team knew about this requirement but had decided to ignore it to emphasize the architectural intention of the design - the ramp was seen as a piece of furniture in the space.

The location of the outdoor TWSI was changed, and an indoor TWSI was incorporated because of the accessibility adviser's guidance. Thus she aimed at a higher accessibility level than the Building Regulation prescribed. She had ambitions on the behalf of the project. The design for the TWSI was designed in dialogue between the professionals. The accessibility adviser communicated knowledge about the need of the visually impaired persons. The building inspired to the use of an industrial chequer plate which was painted orange.

This accessibility adviser could be characterised as a 'lever' for the accessibility in this project. Due to her questioning a dialogue arose about the level of accessibility and the individual solutions. At the same time she contributed with knowledge from SBI guidelines etc. and examples from other buildings. Furthermore she followed up on the dialogue in order to ensure the right solution.

The case of the handrail in section B showed us that the accessibility adviser was involved too late. "*It is crucial to focus on universal design from the beginning in a building process*". The architect also explained that in his experience an early focus establishes a fine starting point for a constructive dialogue.

2. 'Awareness' defines an approach

In 11 out of 14 solutions the factor 'awareness' influenced the quality of the solutions.

The 'awareness' is about: knowledge of the legal requirements, ambitions about accessibility, dialogue about the accessibility level and the solutions, knowledge about legal requirements and needs and also continuous follow-up during the process. Together these elements define and suggest an approach to the improvement of the quality of accessibility in existing buildings by focusing on accessibility from the very beginning to end of the design and building process.

This study is based solely on one case and consequently the 'awareness' approach is not completely developed but we are now in a process of studying more factors in order to build knowledge of how to create architectural accessibility of a high quality.